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BUCHANAN, INGERSOLL & ROONEY PC
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EXAMINER	
HON, SOW FUN	

ART UNIT	PAPER NUMBER
1794	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	**Application No.** 10/521,177	**Applicant(s)** ITO, YOJI	
	Examiner SOPHIE HON	**Art Unit** 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 23 June 2008.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Withdrawn Rejections

1. The 35 U.S.C. 102(b) and 35 U.S.C. 103(a) rejections over Hanmer and Uesaka as the respective primary references, are withdrawn due to Applicant's amendment dated 6/23/08.

New Rejections

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

2. Claims 1, 7, 9, 16, 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Arakawa (US 6,400,433).

Regarding claim 1, Arakawa teaches a polarizing plate comprising a polarizing membrane and an optically anisotropic layer formed from liquid crystal molecules, wherein the optically anisotropic layer is formed on a surface of the polarizing membrane (polarizing membrane (P), optically anisotropic layer (A), Fig. 7, column 7, lines 60-65, optically anisotropic layer (A) is made from discotic liquid crystal molecules, column 7, lines 40-45). Although Arakawa fails to specify that the optically anisotropic layer is formed directly on the surface of the polarizing membrane by coating a coating solution containing the liquid crystal molecules on the surface of the polarizing

membrane, this process is inherent since Arakawa teaches that the optically anisotropic layer is formed directly on the surface of a substrate by coating a coating solution containing the liquid crystal molecules on the surface of the substrate (solution can be coated, column 22, lines 41-45).

Regarding claim 7, Arakawa teaches that the polarizing plate further comprises an anti-reflection layer (film, column 26, lines 35-40).

Regarding claim 9, Arakawa teaches that the liquid crystal molecules in the optically anisotropic layer are discotic liquid crystal molecules, wherein the anisotropic layer comprises a first optically anisotropic layer (A) formed on the polarizing membrane (P) and a second optically anisotropic layer (B) formed on the first optically anisotropic layer (Fig. 7, column 7, lines 55-65, optically anisotropic layer (A) is made from discotic liquid crystal molecules, optically anisotropic layer (B) is also made from discotic liquid crystal molecules, column 7, lines 15-30), wherein the discotic planes of the liquid crystal molecules in the first optically anisotropic layer (A) are oriented at an angle of 60º on average to a direction in which the discotic planes of the liquid crystal molecules in the second optically anisotropic layer (B) are oriented on average (angle (01) between the slow axes (a) and (b), column 7, lines 60-55, direction of discotic cores correspond to slow axis (column 7, lines 15-30), which is within the claimed range of more than 10º.

Regarding claim 16, Arakawa teaches that the discotic planes of the discotic liquid crystal molecules in the first optically anisotropic layer (A) are oriented at an angle of around 90º on average to a surface of the polarizing membrane (essentially vertically

aligned, column 7, lines 15-20, range of 50 to 90º, column 12, lines 55-57) that is within the range of more than 5º.

Regarding claim 21, Arakawa teaches that the second optically anisotropic layer is disposed on the surface of the first optically anisotropic layer, and that both layers are essentially vertically aligned ((A), (B), column 7, lines 15-30, Fig. 7). Thus, the first optically anisotropic layer functions as an orientation layer for the second optically anisotropic layer.

Regarding claim 22, Arakawa teaches a liquid crystal display comprising a liquid crystal cell and the polarizing plate (column 26, lines 35-45).

Claim Rejections - 35 USC § 103

3. Claims 2-6, 8, 10-15, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arakawa as applied to claims 1, 7, 9, 16, 21-22 above.

Arakawa teaches the polarizing plate comprising a polarizing membrane and an optically anisotropic layer formed from liquid crystal molecules, where the optically anisotropic layer is formed directly on the polarizing membrane, as described above.

Regarding claim 2, Arakawa fails to teach in the same embodiment that the liquid crystal molecules in the optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of more than 5º on average to a surface of the polarizing membrane.

However, Arakawa teaches an alternate embodiment where the liquid crystal molecules in the optically anisotropic layer are rod-like liquid crystal molecules, which

long axes are oriented at an angle within the range of 0 to 40º on average to a surface of the polarizing membrane (angle between long axis of rod-like liquid crystal molecule and a surface plane of optically anisotropic layer, column 12, lines 29-35, which is parallel to the surface of the polarizing membrane (P). See Fig. 7), which overlaps the claimed range of more than 5º, for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of more than 5º on average to a surface of the polarizing membrane, as the liquid crystal molecules in the optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Regarding claim 3, Arakawa fails to teach that the long axes of the rod-like liquid crystal molecules are additionally oriented at an angle of less than 5º on average to a transmission axis of the polarizing membrane.

However, Arakawa teaches that the angle can be varied according to a distance between the liquid crystal molecule and the polarizing membrane in a hybrid alignment (column 12, lines 50-55), for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, in the absence of a demonstration of criticality, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have varied the angle at which the long axes of the rod-like liquid crystal molecules are

oriented according to a distance between the liquid crystal molecules and the polarizing membrane in a hybrid alignment, so that the long axes of the rod-like liquid crystal molecules are additionally oriented at an angle of less than 5º on average to a transmission axis of the polarizing membrane, in the optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Regarding claim 4, Arakawa teaches that the liquid crystal molecules in the optically anisotropic layer are discotic liquid crystal molecules (A, column 7, lines 15-22), but fails to teach in the same embodiment that the discotic planes of the discotic liquid crystal molecules are oriented at an angle within the range of less than 5º on average to the surface of the polarizing membrane.

However, Arakawa teaches an alternate embodiment where the liquid crystal molecules are oriented at an angle that is within the range of 0 to 40º on average to a surface of the polarizing membrane (angle between long axis of rod-like liquid crystal molecule and a surface plane of optically anisotropic layer, column 12, lines 29-35, which is parallel to the surface of the polarizing membrane (P). See Fig. 7), which overlaps the claimed range of less than 5º, for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, in the absence of a demonstration of criticality, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used discotic liquid crystal molecules, which discotic planes are oriented at an angle within the range of less than 5º on average to a surface of the polarizing membrane, as

the liquid crystal molecules in the optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Regarding claim 5, Arakawa fails to disclose the thickness of the polarizing membrane.

However, Arakawa teaches that the polarizing membrane is protected by a protective film (membrane, column 26, lines 27-34) which means that it does not function as a structural film, and hence can have a thickness that is within the range of 20μm or less, which can help meet the current market demand for smaller and lighter optical elements.

Therefore, in the absence of a demonstration of criticality, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the polarizing membrane of the polarizing plate of Arakawa with a thickness that is within the range of 20μm or less, in order to meet current market demand for smaller and lighter optical elements.

Regarding claim 6, Arakawa fails to teach that the polarizing plate further comprises a light-diffusing layer.

However, a light-diffusing layer is disposed in an optical element for the purpose of providing the desired uniformity of transmitted light.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the polarizing plate of Arakawa with a light diffusing layer, in order to obtain the desired uniformity of polarized light.

Regarding claim 8, Arakawa teaches that the polarizing plate has an anti-reflection layer for the purpose of providing the desired anti-reflective properties, as described above. In addition, Arakawa teaches that the polarizing plate can further comprise a transparent support having a thickness of 50 μm (column 26, lines 5-10) which is within the claimed range of 70 μm or less.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the anti-reflection layer on the transparent support of the polarizing plate of Arakawa, in order to obtain the desired anti-reflective properties in the desired optical path of the polarizing plate.

Regarding claim 10, Arakawa fails to teach in the same embodiment that the liquid crystal molecules in the first optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of less than 5º on average to a surface of the polarizing membrane.

However, Arakawa teaches an alternate embodiment where the liquid crystal molecules in the optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of 0 to 40º on average to a surface of the polarizing membrane (angle between long axis of rod-like liquid crystal molecule and a surface plane of optically anisotropic layer, column 12, lines 29-35, which is parallel to the surface of the polarizing membrane (P). See Fig. 7), which contains the claimed range of less than 5º, for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of less than 5º on average to a surface of the polarizing membrane, as the liquid crystal molecules in the first optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Regarding claim 11, Arakawa teaches that the liquid crystal molecules in the first optically anisotropic layer can be rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of less than 5º on average to a surface of the polarizing membrane, as discussed above. Arakawa fails to teach that the long axes of the rod-like liquid crystal molecules are additionally oriented at an angle of less than 5º on average to a transmission axis of the polarizing membrane.

However, Arakawa teaches that the angle can be varied according to a distance between the liquid crystal molecule and the polarizing membrane in a hybrid alignment (column 12, lines 50-55), for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, in the absence of a demonstration of criticality, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have varied the angle at which the long axes of the rod-like liquid crystal molecules are oriented according to a distance between the liquid crystal molecules and the polarizing membrane in a hybrid alignment, so that the long axes of the rod-like liquid crystal molecules are additionally oriented at an angle of less than 5º on average to a

transmission axis of the polarizing membrane, in the first optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Regarding claim 12, Arakawa fails to teach in the same embodiment that the liquid crystal molecules in the second optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of more than 15º on average to a surface of the polarizing membrane, and wherein an angle between the long axis of each rod-like liquid crystal molecule and the surface of the polarizing membrane varies according to a distance between the rod-like liquid crystal molecule and the polarizing membrane.

However, Arakawa teaches an alternate embodiment where the liquid crystal molecules in the optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of 0 to 40º on average to a surface of the polarizing membrane (angle between long axis of rod-like liquid crystal molecule and a surface plane of optically anisotropic layer, column 12, lines 29-35, which is parallel to the surface of the polarizing membrane (P). See Fig. 7), which overlaps the claimed range of more than 15º, where in another embodiment, the angle can be varied according to a distance between the liquid crystal molecule and the polarizing membrane in a hybrid alignment (column 12, lines 50-55), for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used rod-like liquid crystal molecules, which long

axes are oriented at an angle within the range of more than 15º on average to a surface of the polarizing membrane, wherein an angle between the long axis of each rod-like liquid crystal molecule and the surface of the polarizing membrane varies according to a distance between the rod-like liquid crystal molecule and the polarizing membrane, as the liquid crystal molecules in the second optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Regarding claims 13, 15, Arakawa teaches that the liquid crystal molecules in the second optically anisotropic layer are discotic liquid crystal molecules ((B), column 7, lines 23-30), wherein the discotic planes of the discotic liquid crystal molecules are oriented at an angle within the range of 50 to 90º on average to the surface of the polarizing membrane (angle between a plane of a discotic core of a discotic liquid crystal molecule and a surface plane of optically anisotropic layer, column 12, lines 45-55, which is parallel to the surface of the polarizing membrane (P). See Fig. 7), which overlaps the claimed range of more than 15º, or more than 85 º, and wherein an angle between the discotic plane of each discotic liquid crystal molecule and the surface of the polarizing membrane varies according to the distance between the discotic liquid crystal molecule and the polarizing membrane in a hybrid alignment (column 12, lines 50-55), for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Regarding claim 14, Arakawa fails to teach in the same embodiment that the liquid crystal molecules in the second optically anisotropic layer are rod-like liquid

crystal molecules, which long axes are oriented at an angle within the range of less than 5º on average to a surface of the polarizing membrane.

However, Arakawa teaches an alternate embodiment where the liquid crystal molecules in the optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of 0 to 40º on average to a surface of the polarizing membrane (angle between long axis of rod-like liquid crystal molecule and a surface plane of optically anisotropic layer, column 12, lines 29-35, which is parallel to the surface of the polarizing membrane (P). See Fig. 7), which contains the claimed range of less than 5º, for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of less than 5º on average to a surface of the polarizing membrane, as the liquid crystal molecules in the second optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

In addition, Arakawa fails to teach that the long axes of the rod-like liquid crystal molecules are oriented at an angle of less than 5º on average to a transmission axis of the polarizing membrane.

However, Arakawa teaches that the angle can be varied according to a distance between the liquid crystal molecule and the polarizing membrane in a hybrid alignment

(column 12, lines 50-55), for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, in the absence of a demonstration of criticality, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have varied the angle at which the long axes of the rod-like liquid crystal molecules are oriented according to a distance between the liquid crystal molecules and the polarizing membrane in a hybrid alignment, so that the long axes of the rod-like liquid crystal molecules are additionally oriented at an angle of less than 5º on average to a transmission axis of the polarizing membrane, in the second optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Regarding claim 17, Arakawa fails to teach in the same embodiment that the liquid crystal molecules in the second optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of more than 15º on average to a surface of the polarizing membrane, and wherein an angle between the long axis of each rod-like liquid crystal molecule and the surface of the polarizing membrane varies according to a distance between the rod-like liquid crystal molecule and the polarizing membrane.

However, Arakawa teaches an alternate embodiment where the liquid crystal molecules in the optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of 0 to 40º on average to a surface of the polarizing membrane (angle between long axis of rod-like liquid crystal molecule

and a surface plane of optically anisotropic layer, column 12, lines 29-35, which is parallel to the surface of the polarizing membrane (P). See Fig. 7), which overlaps the claimed range of more than 15º, where in another embodiment, the angle can be varied according to a distance between the liquid crystal molecule and the polarizing membrane in a hybrid alignment (column 12, lines 50-55), for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of more than 15º on average to a surface of the polarizing membrane, wherein an angle between the long axis of each rod-like liquid crystal molecule and the surface of the polarizing membrane varies according to a distance between the rod-like liquid crystal molecule and the polarizing membrane, as the liquid crystal molecules in the second optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Regarding claim 18, Arakawa teaches that the liquid crystal molecules in the second optically anisotropic layer are discotic liquid crystal molecules ((B), column 7, lines 23-30), wherein the discotic planes of the discotic liquid crystal molecules are oriented at an angle within the range of 50 to 90º on average to the surface of the polarizing membrane (angle between a plane of a discotic core of a discotic liquid crystal molecule and a surface plane of optically anisotropic layer, column 12, lines 45-55, which is parallel to the surface of the polarizing membrane (P). See Fig. 7), which

overlaps the claimed range of more than 15º, and wherein an angle between the discotic plane of each discotic liquid crystal molecule and the surface of the polarizing membrane varies according to the distance between the discotic liquid crystal molecule and the polarizing membrane in a hybrid alignment (column 12, lines 50-55), for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Regarding claim 19, Arakawa fails to teach in the same embodiment that the liquid crystal molecules in the second optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of less than 5º on average to a surface of the polarizing membrane.

However, Arakawa teaches an alternate embodiment where the liquid crystal molecules in the optically anisotropic layer are rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of 0 to 40º on average to a surface of the polarizing membrane (angle between long axis of rod-like liquid crystal molecule and a surface plane of optically anisotropic layer, column 12, lines 29-35, which is parallel to the surface of the polarizing membrane (P). See Fig. 7), which contains the claimed range of less than 5º, for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used rod-like liquid crystal molecules, which long axes are oriented at an angle within the range of less than 5º on average to a surface of the polarizing membrane, as the liquid crystal molecules in the second optically

anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Regarding claim 20, Arakawa fails to teach that the long axes of the rod-like liquid crystal molecules are additionally oriented at an angle of less than 5º on average to a transmission axis of the polarizing membrane.

However, Arakawa teaches that the angle can be varied according to a distance between the liquid crystal molecule and the polarizing membrane in a hybrid alignment (column 12, lines 50-55), for the purpose of providing the desired optical anisotropy (column 2, lines 35-45).

Therefore, in the absence of a demonstration of criticality, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have varied the angle at which the long axes of the rod-like liquid crystal molecules are oriented according to a distance between the liquid crystal molecules and the polarizing membrane in a hybrid alignment, so that the long axes of the rod-like liquid crystal molecules are additionally oriented at an angle of less than 5º on average to a transmission axis of the polarizing membrane, in the second optically anisotropic layer of the polarizing plate of Arakawa, in order to obtain the desired optical anisotropy, as taught by Arakawa.

Response to Arguments

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on (571)272-1401. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sophie Hon/

Sow-Fun Hon

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1794